



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Joseph E. Kernan
Governor

Lori E. Kaplan
Commissioner

100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.in.gov/idem

September 29, 2004

Ms. Jan Pels, HSE-5J
U.S. EPA, Region V
77 West Jackson Boulevard
Chicago, IL 60604

Dear Ms. Pels:

Re: Pre-CERCLIS Screening
U. S. Reduction Company
4610 Kennedy Avenue
East Chicago, Lake County, Indiana

MEMORANDUM OF DECISION

The Indiana Department of Environmental Management (IDEM) under a cooperative agreement with the U.S. EPA investigated this site as a Pre-CERCLIS Screening to determine whether the site warrants further investigation under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA a.k.a. Superfund).

The parcel is approximately 10 acres and was formerly occupied by U.S. Reduction Co. This parcel is located on the north side of E. Chicago Ave. just west of the intersection of Kennedy Ave. The site has a history of industrial use, much of which involved lead.

The Indiana Department of Environmental Management Site Investigations Section through historical research determined that numerous potential lead emission sources occurred throughout Indiana prior to regulations governing those industries. The U. S Reduction Company site is one facility discovered as a potential source of lead and other heavy metals that potentially emitted particulates, which may have contaminated surrounding residential areas. IDEM conducted surface soil sampling in the surrounding residential area to the east and west of the facility. Contaminant levels encountered were inconclusive as to whether or not the U.S Reduction Company is a potential responsible party.

U. S. EPA completed on-site and residential sampling in the vicinity of the U. S. Reduction Company site in conjunction with Resource Conservation and Recovery Act (RCRA) investigation of the USS Lead facility (5300 Kennedy Blvd.). U.S. EPA discovered high levels of lead in residential properties. U.S. EPA is handling the USS Lead facility under the RCRA program and the off-site residential contamination will be handled by the U.S. EPA Superfund program. U.S. EPA will determine responsible parties.

Due to the ongoing Superfund investigation of the USS Lead site, IDEM is deferring all future investigations and cleanup of residential properties to the U.S. EPA Superfund Program, and does not recommend any further action at the U. S. Reduction Company site.

US EPA RECORDS CENTER REGION 5



406937

(From Eckels
list of
smelters)
9/20/05



U. S. Reduction Company MOD
Page 2

Should you have any questions regarding the content of this correspondence, please contact me at 317-232-4402.

Sincerely,

A handwritten signature in black ink, appearing to read "Dan Chesterson", with a long horizontal flourish extending to the right.

Dan Chesterson, Project Manager
Site Investigation Section
Office of Land Quality

INTERNAL CONFIDENTIAL

PRE-CERCLIS SCREENING ASSESSMENT CHECKLIST/DECISION FORM

This checklist can assist the site investigator during the Pre-CERCLIS screening. It will be used to determine whether further steps in the site investigation process are required under CERCLA. Use additional sheets if necessary.

Checklist Preparer: Dan Chesterson/Environmental Manager II September 29, 2004
 (Name/Title) (Date)

100 N. Senate Ave., Indianapolis, IN 46206 317-232-04402
 (Address) (Phone)

dchester@dem.state.in.us
 (E-Mail Address)

Site Name: U. S. Reduction Company

Previous Names (if any):

Site Location: Melville and Chicago Avenue
 (Street)

East Chicago 46312
 (City) (State) (Zip Code)

Latitude: 41°37'30.05" North Longitude: 87°30'61" West

Complete the following checklist. If "yes" is marked, please explain below.

	YES	NO
1. Does the site already appear in CERCLIS?		X
2. Is the release from products that are part of the structure of, and result in exposure within, residential buildings or businesses or community structures?		X
3. Does the site consist of a release of a naturally occurring substance in its unaltered form, or altered solely through naturally occurring processes or phenomena, from a location where it is naturally found?		X
4. Is the release into a public or private drinking water supply due to deterioration of the system through ordinary use?		X
5. Is some other program actively involved with the site (i.e., another Federal, State, or Tribal program)?	X	
6. Are the hazardous substances potentially released at the site regulated under a statutory exclusion (i.e. petroleum, natural gas, natural gas liquids, synthetic gas usable for fuel, normal application of fertilizer, release located in a workplace, naturally occurring, or regulated by the NRC, UMTRCA, or OSHA)?		X
7. Are the hazardous substances potentially released at the site excluded by policy considerations (e.g., deferral to RCRA Corrective Action)?		X
8. Is there sufficient documentation that clearly demonstrates that there is no potential for a release that could cause adverse environmental or human health impacts (e.g., comprehensive remedial investigation equivalent data showing no release above ARARs, completed removal action, documentation showing that no hazardous substance releases have occurred, EPA approved risk assessment completed)?		X

Please explain all "yes" answer(s), attach additional sheets if necessary: The Indiana Department of Environmental Management, Site Investigations section through historical research determined that numerous potential lead emission sources occurred throughout Indiana prior to regulations governing those industries. The U. S. Reduction Company site is one facility discovered as a potential source of metals that potentially emitted particulates, which may have contaminated surrounding residential areas. U.S. Reduction Company was an aluminum refinery. IDEM conducted surface soil sampling in the surrounding residential area to the south of the facility. Other surrounding area to the north, east, and west is industrial/commercial. Contaminant levels encountered did not conclude that U. S. Reduction Company is a potential responsible party. The property has not been redeveloped and abandoned buildings are still present.

U. S. EPA completed on-site and residential sampling in the vicinity of the U.S. Reduction Company site in conjunction with Resource Conservation and Recovery Act (RCRA) investigation of the USS Lead facility. U.S. EPA discovered high levels of lead in residential properties. U.S. EPA is handling the USS Lead facility under the RCRA program and the off-site residential contamination will be handled by the U.S. EPA Superfund program. U.S. EPA will determine responsible parties. The Superfund Remedial Project Manager is Mary Logan for U.S. EPA and IDEM Superfund Project Manager is Kevin Herron.

Site Determination: ☐ Enter the site into CERCLIS. Further assessment is recommended (explain below).

X The site is not recommended for placement into CERCLIS (explain below).

DECISION/DISCUSSION/RATIONALE:


IDEM Site Investigations defer all future investigations and cleanup of residential property to the U.S. EPA Superfund Program under the USS Lead site.

Regional EPA Reviewer:

Print Name/Signature

Date

State Agency/Tribe:

 (DAN CHESTERSON)
Print Name/Signature

7/27/09
Date



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Should you have any questions regarding the content of this correspondence, please contact me at 317-232-4402.

Sincerely,


Dan Chesterson, Project Manager
Site Investigation Section
Office of Land Quality

(From Eckert 1st of 5 meetings)

9/29/05
2



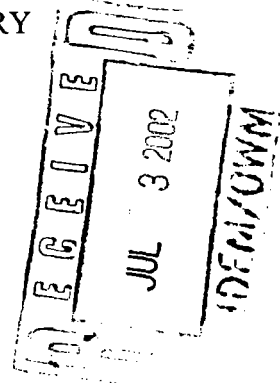


UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 CENTRAL REGIONAL LABORATORY

536 SOUTH CLARK STREET

CHICAGO, ILLINOIS 60605



JUN 26 2002

Date:

Subject: Review of Region 5 Data for **IDEM Lead Site Screening**

From: **John V. Morris, Chemist**
Region 5 Central Regional Laboratory

A handwritten signature of John V. Morris.

To:

Jan Pels
SE-HJ

Attached are the results for: **IDEM Lead Site Screening**

CRL data set number: **20020073**

Samples analyzed for: **Lead**

Results are reported for sample designations: **2002IN01S01 through 2002IN01S81**

RECEIVED

JUL 05 2002

DEPARTMENT OF
ENVIRONMENTAL MANAGEMENT
OFFICE OF LAND QUALITY

Date: 25 June 2002

Analyst: John V. Morris

Sample Batch Number: 20020073

Facility Name: IDEM Lead Site Screening

Analyte: Lead



Narrative for the Analysis of Lead in Soils and Sediments in Batch 20020073

Between 6-15 May 2002, eighty-one (81) soil and/or sediment samples were collected by the Indiana Department of Environmental Management for the purpose of screening for lead contamination. These samples were numbered sequentially, as 2002IN01S01 through 2002IN01S81. No separate station identifiers were present on the custody forms, other than the S01-S81 designations. These samples were received at CRL on 17 May 2002.

J.V. Morris checked out the samples and directed SEE employee A. Shih-Hoellwarth in the process of subsampling the soils and sediments for drying. During the week of 20 May 2002 the samples were dried. Over the next week, J.V. Morris performed the grinding and homogenizing. Because of the large number of samples, the digestions were broken into three digestion sets of 27 samples each. CRL SOP Metals025, a hot block digestion based on EPA method 200.2, was used. The digestion log numbers were 1379, 1380 and 1381. These were prepared between 5-14 June 2002. A fourth digestion, log number 1384, was prepared when the matrix spike for sample 2002IN01S75 was out of control, as discussed below. This digestion was performed on 20 June 2002.

The analyses were performed on 17, 18, 19 and 21 June 2002. Each digestion batch was performed on a separate day. CRL SOP Metals004 was used for the analyses. Because some of the samples were expected to be high concentration for lead, only the high spike solution was used. Since lead was the only analyte of interest, the quality control reports include only lead results, plus the calibration verification for aluminum, that being the element with the only serious interelement correction for lead. All quality control checks for lead were within stated limits in the SOP, with the exception of the last of nine matrix spikes, that for sample 2002IN01S75 in digestion log 1381. The recovery of 205% was not easily explained, since the other elements in the spike solution appeared to be as expected, so the sample was not double spiked. That sample and the ones following were redigested in digestion log 1384. In an attempt to determine what occurred with the spike failure, sample 2002IN01S75 was digested in triplicate, while the next sample, 2002IN01S76, was used for a regular matrix duplicate and spike. No problems were observed in the redigestion, and all audits were in control, including both duplicates of S75. A piece of glass or plastic was observed when the problem sample was redigested. Results for 2002IN01S75 through 2002IN01S81 were taken from the redigestion.

Samples 2002IN01S12, 2002IN01S13, 2002IN01S14, 2002IN01S26, 2002IN01S53, 2002IN01S77 and 2002IN01S78 were diluted to obtain results within the calibration range.

All analytical results files, sample information files and reformat files for ICP analysis can be found on the R5CRL data server using the following path:

h:\r5crl\vol1\EPA-metals\jvmorris\20020073\3300dv\

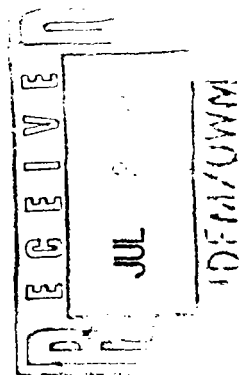
The narrative, QC summary spreadsheets, sample result calculation spreadsheets and the final sample report for ICP analysis can be found on the R5CRL data server using the following path:

h:\r5crl\vol1\EPA-rmetals\jvmorris\20020073\reports\

US EPA CRL - Region V
ICP Final Report Results

Sample Batch Number: 20020073
Study Name: IDEM Lead Site Screening

Sample ID	Element	Concentration	Units	Date Analyzed
2002IN01S01	Lead	29	mg/kg	17 June 02
2002IN01S02	Lead	32	mg/kg	17 June 02
2002IN01S03	Lead	390	mg/kg	17 June 02
2002IN01S04	Lead	95	mg/kg	17 June 02
2002IN01S05	Lead	39	mg/kg	17 June 02
2002IN01S06	Lead	44	mg/kg	17 June 02
2002IN01S07	Lead	140	mg/kg	17 June 02
2002IN01S08	Lead	710	mg/kg	17 June 02
2002IN01S09	Lead	74	mg/kg	17 June 02
2002IN01S10	Lead	43	mg/kg	17 June 02
2002IN01S11	Lead	25	mg/kg	17 June 02
2002IN01S12	Lead	5000	mg/kg	17 June 02
2002IN01S13	Lead	3200	mg/kg	17 June 02
2002IN01S14	Lead	5100	mg/kg	17 June 02
2002IN01S15	Lead	180	mg/kg	17 June 02
2002IN01S16	Lead	130	mg/kg	17 June 02
2002IN01S17	Lead	180	mg/kg	17 June 02
2002IN01S18	Lead	260	mg/kg	17 June 02
2002IN01S19	Lead	180	mg/kg	17 June 02
2002IN01S20	Lead	53	mg/kg	17 June 02
2002IN01S21	Lead	17	mg/kg	17 June 02
2002IN01S22	Lead	94	mg/kg	17 June 02
2002IN01S23	Lead	160	mg/kg	17 June 02
2002IN01S24	Lead	280	mg/kg	17 June 02
2002IN01S25	Lead	160	mg/kg	17 June 02
2002IN01S26	Lead	1800	mg/kg	17 June 02
2002IN01S27	Lead	780	mg/kg	17 June 02
2002IN01S28	Lead	220	mg/kg	18 June 02
2002IN01S29	Lead	190	mg/kg	18 June 02
2002IN01S30	Lead	100	mg/kg	18 June 02
2002IN01S31	Lead	230	mg/kg	18 June 02
2002IN01S32	Lead	68	mg/kg	18 June 02
2002IN01S33	Lead	240	mg/kg	18 June 02
2002IN01S34	Lead	480	mg/kg	18 June 02
2002IN01S35	Lead	220	mg/kg	18 June 02
2002IN01S36	Lead	990	mg/kg	18 June 02
2002IN01S37	Lead	350	mg/kg	18 June 02
2002IN01S38	Lead	420	mg/kg	18 June 02
2002IN01S39	Lead	340	mg/kg	18 June 02
2002IN01S40	Lead	280	mg/kg	18 June 02
2002IN01S41	Lead	410	mg/kg	18 June 02



JUN
25 June 02

US EPA CRL - Region V
ICP Final Report Results

Sample Batch Number: 20020073
Study Name: IDEM Lead Site Screening

Sample ID	Element	Concentration	Units	Date Analyzed
2002IN01S42	Lead	750	mg/kg	18 June 02
2002IN01S43	Lead	290	mg/kg	18 June 02
2002IN01S44	Lead	360	mg/kg	18 June 02
2002IN01S45	Lead	260	mg/kg	18 June 02
2002IN01S46	Lead	63	mg/kg	18 June 02
2002IN01S47	Lead	53	mg/kg	18 June 02
2002IN01S48	Lead	85	mg/kg	18 June 02
2002IN01S49	Lead	95	mg/kg	18 June 02
2002IN01S50	Lead	56	mg/kg	18 June 02
2002IN01S51	Lead	38	mg/kg	18 June 02
2002IN01S52	Lead	140	mg/kg	18 June 02
2002IN01S53	Lead	2800	mg/kg	18 June 02
2002IN01S54	Lead	100	mg/kg	18 June 02
2002IN01S55	Lead	40	mg/kg	19 June 02
2002IN01S56	Lead	19	mg/kg	19 June 02
2002IN01S57	Lead	40	mg/kg	19 June 02
2002IN01S58	Lead	73	mg/kg	19 June 02
2002IN01S59	Lead	64	mg/kg	19 June 02
2002IN01S60	Lead	31	mg/kg	19 June 02
2002IN01S61	Lead	110	mg/kg	19 June 02
2002IN01S62	Lead	30	mg/kg	19 June 02
2002IN01S63	Lead	180	mg/kg	19 June 02
2002IN01S64	Lead	17	mg/kg	19 June 02
2002IN01S65	Lead	250	mg/kg	19 June 02
2002IN01S66	Lead	82	mg/kg	19 June 02
2002IN01S67	Lead	210	mg/kg	19 June 02
2002IN01S68	Lead	220	mg/kg	19 June 02
2002IN01S69	Lead	400	mg/kg	19 June 02
2002IN01S70	Lead	470	mg/kg	19 June 02
2002IN01S71	Lead	450	mg/kg	19 June 02
2002IN01S72	Lead	440	mg/kg	19 June 02
2002IN01S73	Lead	150	mg/kg	19 June 02
2002IN01S74	Lead	92	mg/kg	19 June 02
2002IN01S75	Lead	220	mg/kg	21 June 02
2002IN01S76	Lead	320	mg/kg	21 June 02
2002IN01S77	Lead	1600	mg/kg	21 June 02
2002IN01S78	Lead	6700	mg/kg	21 June 02
2002IN01S79	Lead	300	mg/kg	21 June 02
2002IN01S80	Lead	140	mg/kg	21 June 02
2002IN01S81	Lead	140	mg/kg	21 June 02

US Reduction

Jim
25 June 02

CRL Data Review Qualification Codes

QUALIFIER	DESCRIPTION
B	This flag is used when the analyte is found in the associated <u>B</u> lank as well as the sample. It indicates possible blank contamination and warns the user to take appropriate action while assessing the data. See the case narrative for a discussion of common lab contaminants and/or the relative concentration of contamination in the samples and blanks for relevance.
J	This flag is used when the analyte is <u>estimated</u> due to quality control limit(s) being exceeded. This flag accompanies all GC/MS tentatively identified compounds (TICs). This flag also applies to a suspected, unidentified interference. This flag is placed on affected detected results as well as non-detected (i.e., "U" flagged) results. (<u>J</u> is the flag used in the Superfund CLP SOW and Data Review Functional Guidelines and is used by CRL for consistency.)
M	This flag is used when the analyte is confirmed to be qualitatively present in the sample, extract or digestate, with a quantity at or above the CRL <u>M</u> ethod Detection Limit (MDL) but below the lowest concentration of the calibration curve. This flag indicates the quantitated value is <u>estimated</u> since it falls below the lowest calibration standard in the calibration curve.
N	This flag applies to GC/MS <u>T</u> entatively Identified Compounds (TICs) that have a mass spectral library match.
Q	This flag applies to analyte data that are severely estimated due to quality control and/or <u>Q</u> uantitation problems, but are confirmed to be qualitatively present in the sample. <u>No value is reported with this qualification flag.</u>
R	This flag applies to analyte data that are <u>R</u> ejected and unusable due to severe quality control, quantitation and/or qualitative identification problems. No other qualification flags are reported for this analyte. <u>No value is reported with this qualification flag.</u>
U	This flag is used when the analyte was analyzed for but <u>U</u> ndetected in the sample. The CRL RL for the analyte accompanies this flag. When the customer requests CRL to report below our RL down to our MDL, undetected analytes are reported with a "U" code and the MDL. As with sample results that are positive, the value is corrected for dry weight, dilution and/or sample weight or volume.

03/07/01

WMD/7301

20020073

ENVIRONMENTAL PROTECTION AGENCY
FOR THE TEAM: METALS

50108D

7/1/02 SHEET 10 OF 4

6

VISION/BRANCH SUPERFUND

SAMPLING DATE 5/6-15/02

LAB ARRIVAL DATE 5/17/02

DUE DATE 6/17/02

NUMBER 50108D

DATASET NUMBER 20020073

STUDY LEAD SITE SCREENING

PRIORITY N

CONTRACTOR IDEM

L LOG NRER	SAMPLE DESCRIPTION	SEDIMENTS SOLID		MATHEN.....		MATHEN.....	
		S PR	TEST.....	TEST.....	TEST.....	TEST.....	TEST.....
		MG/KG (DRY WT.)	UNITS.....	UNITS.....	UNITS.....	UNITS.....	UNITS.....
		ME14193	ME1235026	ME1235026	ME1235026	ME1235026	ME1235026
2IN01							
S01	5-039336						
S02	5-039337						
S03	5-039338						
S04	5-039339						
S05	5-039340						
S06	5-039341						
S07	5-039342						
S08	5-039343						
S09	5-039344						
S10	5-039345						
S11	5-039346						
S12	5-039347						
S13	5-039348						
S14	5-039349						
S15	5-039350						
S16	5-039021						
S17	5-039022						
S18	5-039023						
S19	5-039024						
S20	5-039025						
S21	5-039026						

WMO/VB01

20020073

501080

⑥

ENVIRONMENTAL PROTECTION AGENCY
FOR THE TEAM METALS

7/11/02 SHOOT 30F4

MISSION/BRANCH SUPERFUND SAMPLING DATE 5/6-15/02 LAB ARRIVAL DATE 5/17/02 DUE DATE 6/17/02
 NUMBER 501080 DATASET NUMBER 20020073 STUDY LEAD SIB SURVEILLANCE PRIORITY N CONTRACTOR IDEM

LOG INER	SAMPLE DESCRIPTION	SEDIMENTS SOLID S PR	MAINX..... TEST..... UPITS..... ME1235826	MAINX..... TEST..... UPITS..... ME1235826	MAINX..... TEST..... UPITS..... ME1235826	MAINX..... TEST..... UPITS..... ME1235826
IN01						
S43	5-039048					
S44	5-039049					
S45	5-039050					
S46	5-039051					
S47	5-039052					
S48	5-039053					
S49	5-039054					
S50	5-039055					
S51	5-039056					
S52	5-039057					
S53	5-039058					
S54	5-039059					
S55	5-039060					
S56	5-039061					
S57	5-039062					
S58	5-039063					
S59	5-039064					
S60	5-039065					
S61	5-039066					
S62	5-039067					
S63	5-039068					

IN 100/1000

2002 0073

ENVIRONMENTAL PROTECTION AGENCY
FOR THE TEAM METALS

501080

⑥

7/1/02 SHOOT 20F4

DIVISION/BRANCH SUBSURFACESAMPLING DATE 5/6-15/02LAB ARRIVAL DATE 5/17/02DUE DATE 6/17/02NUMBER 501080 DATASET NUMBER 20000013STUDY LEADSITE SCREENINGPRIORITY NCONTRACTOR IDEM

LOG SER	SAMPLE DESCRIPTION	REQUIREMENTS SOLID S PR	MATERIAL..... TEST..... UP ITS..... MET4195	MATERIAL..... TEST..... UP ITS..... MET1235026	MATERIAL..... TEST..... UP ITS..... MET1235026	MATERIAL..... TEST..... UP ITS..... MET1235026
<u>211001</u>						
<u>S22</u>	<u>5-039027</u>					
<u>S23</u>	<u>5-039028</u>					
<u>S24</u>	<u>5-039029</u>					
<u>S25</u>	<u>5-039030</u>					
<u>S26</u>	<u>5-039031</u>					
<u>S27</u>	<u>5-039032</u>					
<u>S28</u>	<u>5-039033</u>					
<u>S29</u>	<u>5-039034</u>					
<u>S30</u>	<u>5-039035</u>					
<u>S31</u>	<u>5-039036</u>					
<u>S32</u>	<u>5-039037</u>					
<u>S33</u>	<u>5-039038</u>					
<u>S34</u>	<u>5-039039</u>					
<u>S35</u>	<u>5-039040</u>					
<u>S36</u>	<u>5-039041</u>					
<u>S37</u>	<u>5-039042</u>					
<u>S38</u>	<u>5-039043</u>					
<u>S39</u>	<u>5-039044</u>					
<u>S40</u>	<u>5-039045</u>					
<u>S41</u>	<u>5-039046</u>					
<u>S42</u>	<u>5-039047</u>					